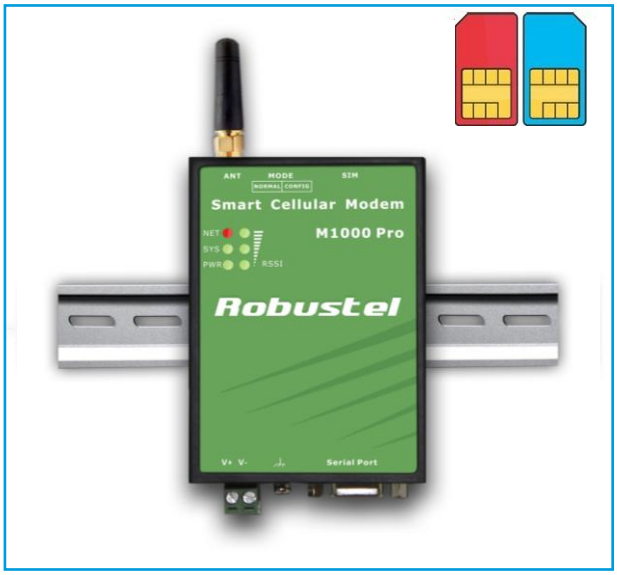
M1000 Pro V2

Dual SIM Industrial Serial to Cellular Gateway

for GSM/GPRS/EDGE/UMTS Networks

M1000 Pro V2 is a rugged serial to cellular gateway with dual SIM offering state-of-the-art 2G/3G connectivity for machine to machine (M2M) applications.



Key Features

- Dual SIM redundancy for continuous cellular connections.
- Auto GPRS/UMTS connect/reconnect (no AT commands required), watchdog for reliable communications.
- GPRS/UMTS with backup to CSD.
- Transparent TCP and UDP socket connections.
- Supports Virtual COM (COM port redirector).
- Supports ICMP, DDNS.
- Supports Modbus/RTU to Modbus/TCP.
- Auto reboot via SMS/Caller ID or during a preset time of a day.
- Various dial-up policies, such as always online, auto disconnect GPRS/UMTS when idle, wakeup by serial data, SMS, Caller ID, during a preset time of a day or periodically at preset interval.
- Auto SMS of IP for dynamic IP SIM Card.
- Packetization methords: packet length / time interval / special end characters.
- Remote configuration via SMS.
- Firmware upgrade via serial interface.
- RS232/RS485 selectable by software, additional one digital input and one digital output.
- Six LED indicators provide signal strength (RSSI) and status.
- Wide range input voltages from 9 to 36 VDC and wide range operating temperature: -25 to 70 °C.
- The metal enclosure can be mounted on a DIN-rail or on the wall, also with extra ground screw.

Applications

- Automatic Meter Reading
- PLC Remote Management
- Vending Machine Remote Management
- LED Signage Publication
- POS Connectivity Backup

Regulatory and Type Approvals

- Approval and Detective: CE 1177, R&TTE, RoHS, WEEE
- EMC: EN 61000-4-2 (ESD) Level 4, EN 61000-4-3 (RS) Level 4
  EN 61000-4-4 (EFT) Level 4, EN 61000-4-5 (Surge) Level 3
  EN 61000-4-6 (CS) Level 3, EN 61000-4-8, EN 61000-4-12

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Specifications

Cellular Interface
- Standards: GSM/GPRS/EDGE/UMTS
- GPRS: max. 86 kbps (DL & UL), class 10
- EDGE: max. 236.8 kbps (DL & UL), class 12
- UMTS: max. 384 kbps (DL/UL)
- Frequency: 850/900/1800/1900 MHz for GPRS/EDGE, **900/2100 MHz for UMTS**
- CSD: Up to 14.4 kbps
- Output Power: 1 watt GSM1800/1900
  2 watts EGSM 900/GSM 850
- SIM: 2 x (3V & 1.8V)
- Antenna Interface: SMA Female, 50 ohms impedance

Serial Interface
- Number of Ports: 1 x DB9 Female
- Serial Standards: RS232 and RS485 selectable by software
- ESD Protection: 15KV
- Parameters: 8N1, 1200bps to 115200bps
- Flow Control: RTS/CTS, XON/XOFF
- RS-232: TxD, RxD, RTS, CTS, GND
- RS-485: Data+ (A), Data- (B), GND

System
- LED Indicators: 6 indicators, PWR, RUN, NET and 3 level RSSI
- Real Time Clock: Built-in real time clock with button battery
- Watchdog and Timer: Built-in watchdog and timer

Software
- Network protocols: PPP, TCP, UDP, ICMP, DDNS
- Serial Port: TCP client/server, UDP, Virtual COM, Modbus/RTU to Modbus/TCP

Power Supply and Consumption
- Power Supply Interface: 2-pin 5mm pluggable terminal block
- Input Voltage: 9 to 36 VDC
- Power Consumption: Idle: 50-60 mA @ 12 V
  Data Link: 100 to 200 mA (peak) @ 12 V

Physical Characteristics
- Housing & Weight: Metal, 300g
- Dimension(L x W x H): 102.4 x 71.4 x 29.4 mm
- Installation: 35mm Din-Rail or wall mounting or desktop

Environmental Limits
- Operating Temperature & Humidity: -25 to 70°C, 5 to 95% RH
- Storage Temperature: -40 to 85°C

Warranty
- Warranty Period: 1 Year

Note: 3G version does not support auto reboot via SMS/Caller ID when GPRS/UMTS is online.

Selection and Ordering Data

Model No.	Description
M1000-PGPRSA	1-port RS232, GPRS Class 10
M1000-PGPRSB	1-port RS232/RS485, GPRS Class 10
M1000-PEDGEA	1-port RS232, GPRS/EDGE Class 12
M1000-PEDGEB	1-port RS232/RS485, GPRS/EDGE Class 12
M1000-PUMTSA	1-port RS232, GPRS/EDGE/UMTS
M1000-PUMTSB	1-port RS232/RS485, GPRS/EDGE/UMTS

Optional Accessories (can be purchased separately)
- AC/DC Power Supply Adapter
- Rubber SMA Antenna
- 35mm Din-Rail mounting kit or Wall mounting kit
- Serial cable (DB9 Female to DB9 Male)
- DB9 Male to terminal block for serial port